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FINAL REPORT AND RECOMMENDATIONS of the TASK FORCE ON VETERINARY MEDICAL EDUCATION IN MARYLAND

APRIL, 1979

Task Force on Veterinary Medical Education in Maryland 16 Francis Street Annapolis, Maryland 21401 (301) 269-2971

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TABLE OF CONTENTS

		Page No	2
1.	Introduction	1	
2.	Overview of Veterinary Medical Education in Maryland	3	
3.	Studies of the Need for Veterinary Medical Education	7	
4.	Alternatives Considered by the Task Force	13	
5.	Recommendations	17	
6.	Implementation and Financing	25	
7.	Benefits of the Proposal	39	
Ref	erences	41	
Арр	endix	42	

1. INTRODUCTION

This study was undertaken in response to Joint House-Senate Resolution

No. 84 of the 1978 Maryland General Assembly. The resolution requested that
the Commissioner of Higher Education appoint a task force to study the need to
establish a school of veterinary medicine in the State and to submit a report
of findings and recommendations to the General Assembly.

Commissioner of Higher Education, Dr. Sheldon H. Knorr, appointed the following persons to the task force:

- SHELDON H. KNORR, Ph.D., Commissioner of Higher Education, Chairman;
- I. JEROME ABRAMSON, Ph. D., SM (AAM); Microbiologist, U. S. Food and Drug Administration;
- FRANK L. BENTZ, JR., Ph. D.; Vice President for Agricultural Affairs and Legislative Relations, University of Maryland;
- HARVEY R. FISCHMAN, D.V.M., Dr. P.H.; Associate Professor, Department of Epidemiology, School of Hygiene and Public Health, The Johns Hopkins University;
- ROBERT C. HAMMOND, V.M.D.; Chairman, Department of Veterinary Science, University of Maryland - College Park;
- ROGER E. OLSON, D.V.M.; Practicing Veterinarian;
- DAVID E. PRICE, M.D., Dr. P.H.; Special Assistant, Office of the Provost, The Johns Hopkins University;
- R. GARY ROOP, D.V.M.; Practicing Veterinarian and President, Maryland Veterinary Medical Association.

This Task Force met on numerous occasions to discuss and evaluate information on current conditions and trends and to develop recommendations for meeting Maryland's future needs.

Chapter 2 of this report is a summary of the State's past and present efforts to provide veterinary medical education for its residents. Chapter 3 is a review of recent studies of the need for veterinary medical education. Chapter 4 is a description of the various alternatives considered by the Task Force in its deliberations. Chapter 5 contains the major recommendations of the Task Force. Chapter 6 contains cost estimates for the Task Force recommendations and a plan for their implementation. Chapter 7 is a summary of the benefits that the Task Force believes would accrue to the State from implementing the recommendations contained in this report.

OVERVIEW OF VETERINARY MEDICAL EDUCATION IN MARYLAND

The State of Maryland has provided its citizens with opportunities for veterinary medical education through contractual arrangements with schools of veterinary medicine in other states. Under these arrangements, the State pays a specified fee for a certain number of student places at these institutions. Students who attend public institutions under these contracts are usually permitted to attend at in-state tuition rates. A small number of Maryland residents also attend schools of veterinary medicine outside these contractual arrangements. These students pay out-of-State tuition if attending public institutions and Maryland makes no payment to the schools.

The bulk of Maryland's contractual arrangements are with institutions located in states that are members of the Southern Regional Educational Board (SREB). The SREB was formed in 1948 by fourteen Southern States, including Maryland. Since 1949, Maryland has utilized contracts with the SREB to provide veterinary medical education opportunities to State residents. Under this program, the SREB determines the schools which Maryland residents are eligible to attend and the number of spaces reserved for Maryland students at each institution. The SREB also determines the fee that is to be paid by contracting states.

In addition to contracts through the SREB, Maryland has developed arrangements with Ohio State University, Cornell University, and the University of Pennsylvania for student places. Both the number of spaces and the cost of the contract is negotiated directly by the State Board for Higher Education and the institution involved.

For the 1979-80 Academic Year (Fiscal Year 1980) Maryland will have contracts for the education of 117 State residents at veterinary schools at a cost of \$669,600. The number of spaces and the costs at each institution are shown in Table 1. Of these spaces, 39 are for entering students and the remainder for continuing students. Table 2 shows the number of entering spaces at each institution for fall, 1979.

In recent years, the number of contract spaces has increased significantly. During the ten-year period from Fall 1969 to Fall 1979, the number of spaces increased from 46 to 117 (154%). Most of this increase occurred during the past five years as the number of spaces increased from 59 in Fall 1974 to 117 in Fall 1979 (98%). Table 3 shows the ten-year trend in the numbers of contracts for veterinary medical education.

By Fall 1982, when Maryland's recently initiated contracts with Pennsylvania and Cornell are fully phased in, Maryland will have a total of 151 spaces (Florida - 60, Georgía - 8, Tuskegee - 28, Ohio State - 15, Pennsylvania - 20, Cornell - 20). Because there has been a significant increase in veterinary schools operating or planned in SREB states in recent years, a greater number of SREB contracts are likely to be available in the near future. Thus, there is a strong possibility that more than 151 spaces will be available to Maryland residents by the fall of 1982.

TABLE 1

CONTRACTUAL ARRANGEMENTS WITH VETERINARY SCHOOLS Fall, 1979 (Fiscal Year 1980)

Institution	Number of Student Spaces	Cost
SREB Institutions Tuskegee Institute University of Georgia University of Florida	23 24 45	\$105,500 132,000 236,500
Other Institutions Ohio State University University of Pennsylvania Cornell University Total	15 5 5	105,600 45,000 45,000 \$669,600

TABLE 2
ENTERING SPACES RESERVED FOR MARYLAND RESIDENTS
Fall, 1979

Institution	Entering Spaces
Tuskegee Institute	7
University of Georgia	2
University of Florida	15
Ohio State University	5
University of Pennsylvania	5
Cornell University	5
Total	39

TABLE 3

CONTRACTUAL SPACES AT VETERINARY SCHÖOLS FALL 1969 to FALL 1979

Institution	Fal1 1969	Fal1 1970	Fa11	Fall 1972	Fa11	Fa11 1974	Fa11 1975	Fa11 1976	Fa11	Fa11 1978	Fall 1979
Tuskegee Institute	9	9	9	ς.	9	∞	10	∞	13	16	23
University of Ga.	40	38	38	41	43	77	47	51	77	36	24
University of Fla.									15	30	45
Ohio State Univ.					7	7	6	12	15	15	15
Cornell Univ.											5
University of Pa.											5
TOTAL	97	77		97 77	53	59	99	71	87	97	117

3. STUDIES OF THE NEED FOR VETERINARY MEDICAL EDUCATION

Several studies have been carried out in recent years on a national level and within Maryland of the need for increased opportunities for veterinary medical education. The Task Force considered a number of these studies in developing its recommendations. Several of these are summarized in this chapter.

Maryland Council for Higher Education (1974). The Maryland Council for Higher Education (predecessor of the State Board for Higher Education) under took a study of the State's need for veterinary medical education at the request of the Governor. The study found that Maryland did not have a shortage of veterinarians and recommended that a school of veterinary medicine not be established. However, it was recommended that the number of contractual arrangements be expanded and that development of regional cooperative arrangements be explored with any nearby states that establish a school. The study also recommended that the Maryland Veterinary Medical Association explore the possibility of developing programs with the University of Maryland and the Johns Hopkins University to provide continuing education programs for the practicing veterinarians of the State.

University of Maryland (1976). This study emphasized the increasingly important roles that veterinarians were playing in the total field of biomedical science, including areas such as consumer protection, public health, human and animal research, and the pharmaceutical and biological industries. The study pointed out that although Maryland could continue to contract for student places in other states, there were a number of advantages to having a veterinary school in the State. These advantages included providing diagnostic and referral services, extension and continuing education,

postgraduate education, technical education, and carrying out research.

The study recommended that the University of Maryland and Virginia Polytechnic

Institute and State University (VPI&SU) develop a cooperative regional

school of veterinary medicine. Under the proposal, both institutions

would offer a full four-year course of study leading to a professional

degree with some specialization by each during the final (clinical) year

of study.

University of Maryland (1977). This report used a variety of methods to estimate the need for veterinarians in Maryland. The report concluded that there was a shortage of veterinarians both within Maryland and nationally and that this shortage would continue for the foreseeable future. The study cited the advantages of establishing a regional school with neighborin states to increase the number of veterinarians graduated and to help meet the demand of Maryland residents for admission to veterinary school.

University of Maryland (1978). This study cited: (1) the increasing variety of roles filled by veterinarians, (2) a high level of student demand for admission to veterinary school, (3) estimates of a shortage of veterinarians, and (4) the variety of services provided by a veterinary school. The study contained a recommendation that the University of Maryland establish a veterinary school. This recommendation did not contemplate a regional institution as did the previous studies.

The Johns Hopkins University (1978). This study focused on planning for a veterinary school that would complement the biomedical activities carried out at Johns Hopkins and on meeting the growing demand for veterinarians outside traditional fields of practice. The plan set forth in the report contemplated developing a school to prepare veterinarians for careers in teaching, medical and surgical research, comparative medicine,

environmental monitoring, epidemiology and public health, pathology, toxicology, and regulatory activities. The report also emphasized that establishing a school would result in a number of important benefits accruing to the State through establishment of relationships with other institutions and agencies, development of continuing education programs for practitioners, and improvement of standards of practice.

Southern Regional Education Board (SREB) (1978). The SREB report,
Law, Medicine, Veterinary Medicine: Issues in Supply and Demand, discussed
the history of SREB in expanding veterinary medical education. The
report noted that, because of the significant expansion of opportunities
in SREB states, these states accounted for eight (36%) of the 22 schools
in the nation and 32 percent of the first year enrollments nationally.

The report noted that SREB states had increased their ratio of new students
entering veterinary school per 100,000 of population in recent years, but
that the SREB (and Maryland) remained below the national rate. At the
same time, the SREB still was below the national average in active
veterinarians per 100,000 of population. Maryland, however, was highest
among SREB states and above the national average on this measure.

The report concluded that the overall supply of veterinarians would become in balance with needs during the early 1980's. The areas where needs would increase in the future were likely to be regulatory fields, research, and other specialized fields.

SREB (1978). The SREB report, A Current Overview of Veterinary Medical Education in the South, provided an overview of developments both within the SREB and nationally. The report emphasized the significant increases in veterinary medical education opportunities both within and outside the SREB and the fact that the maximum number of schools recommended by the SREB in 1974 had already been reached.

Arthur D. Little, Inc. (1978). This study was prepared by Arthur D. Little, Inc. for the American Veterinary Medical Association (AVMA) and represents the most detailed and comprehensive study carried out in recent years of the supply and demand for veterinarians nationally.

The study found that as of 1977 the supply of veterinarians in private practice was about in balance with the estimated demand. However, the study estimated that there was a slight shortage of veterinarians in educational institutions and a substantial shortage in industry. The report projected that there would be a 20 percent surplus of veterinarians generally if the present number of veterinary schools continued in existence and a 23 percent surplus if four proposed schools opened.

Among the major recommendations of the study were: (1) work toward regionalization of veterinary schools and broadening interstate contractual arrangements in order to help relieve pressures to build additional schools; (2) expand post-graduate training in research and laboratory animal medicine; (3) increase support for training veterinarians in research and research-related specialities; and (4) expand placement services to help to alleviate spot shortages that exist throughout the country.

Two additional findings of this study are of interest. A survey conducted of practicing veterinarians that concerned the major factors considered in deciding where to practice, found that the most important reasons, in order, were: (1) family considerations, (2) perception that there was a general need, (3) purchase of an established practice, (4) perception that the area could support another practice, and (5) the aesthetic or recreational attributes of the area. Because of Maryland's relatively high levels of wealth and standard of living, this finding

helps explain why the State has attained a ratio of veterinarians per population higher than the national average despite not having a veterinary school. Another finding was that nationally only 50 percent of veterinarians initially were employed in the state of which they were a resident at the time they received their DVM degrees and only 40 percent were initially employed in the state in which they obtained their degrees, regardless of residence. Because about 50 percent of Maryland students who have attended institutions in other states through contractual arrangements have returned to practice in Maryland, it appears that Maryland has fared proportionately no worse than other states in obtaining practicing veterinarians from among its residents. This also suggests that factors other than state of residence and state in which one attends school are more important in influencing the level of services states have available to their residents.

U. S. Department of Health, Education and Welfare (1978). The recent federal government report, On the Status of Health Professions Personnel, dealt with the issue of the supply and demand for veterinarians. The report emphasized the problem of geographic maldistribution of practicing veterinarians with an area of particular shorage being farm animal veterinarians in rural locations. This study projected a surplus of veterinarians by 1990 of between two percent and seven percent, depending on how many additional schools begin operation.

In brief, the most recent studies that have been carried out have focused on the need for educating veterinarians for new and specialized fields rather than on increasing the supply of veterinarians in traditional fields of practice. These studies, unlike some earlier ones, have expressed concern about the possibility of a surplus of veterinarians developing in the near future in traditional fields of practice. This concern about a possible

surplus has resulted, to a large extent, from the relatively significant expansion of veterinary medical education opportunities in recent years and from current plans for additional schools.

The Maryland Veterinary Medical Association has correspondingly shifted its assessment of the appropriate methods for providing veterinary medical education for State residents. In 1974, the MVMA strongly urged the Governor to explore alternatives for increasing the access of Maryland residents to veterinary medical education opportunities, including development of a full school in the State. However, in November, 1978 the MVMA adopted a recommendation favoring continuation of contractual arrangements and opposing development of a school in Maryland. More recently, the MVMA also went on record opposing establishment of a joint program for veterinary medical education. The Appendix of this report contains these three MVMA position statements. Also in the Appendix, is the Minority Dissent to this report, filed by Dr. R. Gary Roop, task force member and President of the Maryland Veterinary Medical Association.

4. ALTERNATIVES CONSIDERED BY THE TASK FORCE

A number of alternatives for providing veterinary medical education opportunities were considered by the Task Force. The four major alternatives considered are discussed in this chapter together with an assessment of the strengths and weaknesses of each.

1. Maintenance of Contractual Arrangements. This approach would involve a continuation of Maryland's contractual arrangements with the SREB and with institutions in other states and possibly an expansion of the number of contracts as more spaces become available through enlargement of existing institutions and the addition of new ones.

The major advantage to Maryland of this arrangement is its low cost.

Contracts make it unnecessary for the State to invest heavily in the facilities required for a full veterinary school. In addition, contractual arrangements provide the State with the flexibility to alter the number of contracts relatively quickly in response to changing needs and circumstances. Contractual arrangements also usually make it possible for Maryland residents to attend public institutions in other states at the same rates as in-state students. Maintaining contracts with a number of schools also provides students with a variety of options for attending school and provides for diversity in the types of educational experiences received by students. Finally, contractual arrangements will not result in the sharp increase in veterinary manpower that opening a new school would and, therefore, this approach would not contribute significantly to creating any surplus of veterinarians that might develop in the future because of expansion in other states.

Contractual arrangements also have a number of disadvantages. For one, the State has no direct control over the type and quality of education at the schools attended by Maryland residents. The only control is through choice of schools with which to contract. Another disadvantage is that different schools have different course requirements for admission. This complicates the curriculum decisions that must be made by undergraduates preparing to apply to veterinary school. Finally, the absence of veterinary school in the State deprives it of the full range of referral, research, and extension services that such institutions provide.

2. Establishment of a Full School of Veterinary Medicine. This alternative involves establishment in the State of a full school for educating veterinarians at all levels of study.

The major advantage of this alternative is, of course, the expansion of the number and convenience of educational opportunities for State residents wishing to become veterinarians. The State also would have control over the type and quality of education provided. Undergraduate students would have an easier time determining the types of programs to take in preparation for applying for admission. The State also would benefit from the full range of services available from a school physically located in the State. Finally, institutions of higher education in the State, particularly the medical schools, and various state agencies would benefit from the research and public service relationships likely to develop with such a school.

The major disadvantage is cost. The amount of money that would be required to build and operate a full school would be high. Construction costs would be in the neighborhood of \$30 to 40 million and annual operating costs would be \$5 to 6 million in 1979 dollars, based on the experience of recently developed schools. The other disadvantage is that any new school is likely

to add significantly to the supply of veterinarians and would contribute to any surplus that develops. If a surplus developed, cutting back on enrollments would be fiscally difficult because of the large investment in facilities, staff, and equipment.

3. Consolidate Contracts at VPI&SU. This alternative involves consolidating most of Maryland's contracts at the proposed veterinary school at VPI&SU, which is scheduled to begin operation in Fall, 1980. Each year 30 entering spaces are expected to be available with a total of 120 per year available when in full operation.

The major advantage to the State would be one of cost. As noted above, a large investment by Maryland would not be required and a certain amount of flexibility could be maintained in the number of spaces utilized by the State. Consolidation of most of the contracts at VPI&SU would also make preparation for application less complex for Maryland undergraduates. Finally, contractual arrangements would permit VPI&SU to meet Virginia and Federal requirements that the school serve a multistate region.

One disadvantage would be that VPI&SU would not be able to make available as large a number of contracts as will be available within the next few years under present arrangements. Thus, some existing contracts still would have to be maintained, although there would be less diversity available to State residents. Also, as with present arrangements, Maryland would have little or no control over the type and quality of education provided. This disadvantage could be a significant one if the school at VPI&SU failed to develop into a high quality institution and Maryland was heavily committed to contracts with the institution.

4. Participation with VPI&SU in a Regional School. This alternative would entail developing a teaching clinic in Maryland as part of a cooperative effort with the proposed veterinary school at VPI&SU. Maryland students would attend VPI&SU for their first three years of study under contractual arrangements and then would have the option (as would Virginia students) of studying during their fourth (clinical) year at either VPI&SU or the Maryland clinic.

The major advantage is that most of the referral, research, extension and continuing education services available through a veterinary school would be provided by having a clinic located in Maryland. This arrangement also would give Maryland a role in setting educational policy at the institution. This would help to ensure that the type and quality of education provided meets State needs. Consolidation of most of the State's contracts at VPI&SU also would make it easier for undergraduate students to prepare for admission. The contractual approach would to a large extent maintain the State's flexibility in determining the number of spaces available to Maryland residents. This arrangement would increase the variety of clinical experiences available to students by providing them the option of undertaking clinical training in two different locations. Finally, this approach would meet requirements that the school be regional.

The major disadvantage of this proposal is cost. This arrangement would not be as costly as establishing a total veterinary school (it would entail about half the cost) but it would be considerably more expensive than the current contractual arrangements. Also, Maryland still would have to maintain other contracts to provide for the number of places that will be available to the State under existing arrangements.

5. RECOMMENDATIONS

THE TASK FORCE RECOMMENDS THAT THE STATE CONSIDER ESTABLISHMENT OF
A CLINICAL TEACHING FACILITY AS PART OF A COOPERATIVE SCHOOL OF VETERINARY
MEDICINE WITH VPI&SU. This chapter outlines the details of this proposal.
Educational Activities

The program of study leading to the DVM under the proposed arrangement would consist of the four-year course of study typically found in schools of veterinary medicine. The first three years would consist of the study of basic and abnormal biology and the fourth year would consist of clinical experience in the diagnosis, treatment, and prevention of disease. The first three years of study would take place at VPI&SU. For the clinical year of study, students could attend either the VPI&SU clinic, the Maryland clinic, or both. In addition, each clinic would maintain relationships with other nearby facilities and agencies thereby permitting students to also gain experience at these sites.

In addition to the program of study leading to the professional degree (DVM), each clinic would offer postgraduate programs leading to Board Certification and/or the Ph.D. These would prepare students who had completed DVM programs for careers in teaching, research, and in specialized fields of practice. Each clinic also would develop programs of continuing education for practicing DVM's.

Both the VPI&SU and Maryland clinics would provide students with experience in dealing with problems that occur in dairy and beef cattle, swine, sheep, and poultry. The Maryland clinic would have additional specialized emphases in equine medicine and surgery, companion animal medicine, zoo animal medicine, environmental toxicology, and public veterinary medicine. The VPI&SU Clinic would develop expertise in other fields.

Public Service Activities

One of the most important roles of the clinic would be to serve the residents of the State and practicing veterinarians through diagnosis and treatment of referral cases. Just as a physician relies on a hospital staffed with specialists and equipped to deal with special problem, so too is there a need for a veterinary clinic to serve as a backup to the practicing veterinarian. The specialized nature of the clinic staff would permit cases with special problems to be treated that could not routinely be handled by most veterinarians engaged in general practice.

One of the major functions of the clinic would be provision of diagnostic services. An excellent diagnostic laboratory operating in conjunction with the teaching clinic is important both for teaching students and for aiding faculty specialists with cases referred to the clinic. It must be a laboratory with the capacity to perform highly sophisticated tests for unusual conditions as well as routine tests required in every day practice.

This requirement raises the possibility of duplicating the diagnostic capability of the proposed central laboratory of the Maryland Department of Agriculture for which a new facility has been planned to be located near Parole. Should the proposal outlined in this report be adopted, the Task Force believes arrangements should be developed for a joint effort between the teaching clinic and the Maryland Department of Agriculture whereby a high quality diagnostic laboratory would be situated at the clinic and serve the teaching and public service needs of the teaching clinic and the needs of the Maryland Department of Agriculture. To duplicate this resource by creating two major laboratories would be costly and the competitition between them for skilled personnel predictably

would weaken their individual capabilities. On the other hand, developing joint arrangements would most likely result in increased benefits to both the veterinary clinic and to the Department of Agriculture with the costs being considerably lower than if both projects were undertaken.

In addition to services provided at the clinical site, it is contemplated that the clinic will develop outreach programs to serve parts of the State not near it. There exist a number of facilities that are located throughout the State that could serve as the bases of operation for such outreach activities.

Research

The clinic would carry out research in various biomedical fields. Because of Maryland's proximity to Federal research agencies and the presence of two medical schools in the State, the potential exists for entering into relationships which would greatly enhance the quality of biomedical research carried out in the State.

A special emphasis of the research carried out would be dealing with animal problems encountered in Maryland. It is anticipated that this research emphasis would contribute to alleviating diseases adversely affecting the economic well-being of the animal industry in the State. As with public service activities, outreach research programs are contemplated. Students

Notwithstanding that the supply and demand of veterinarians is in balance nationwide, many Maryland youth desire to enter the field. The Task Force believes that the State does not have the responsibility to provide veterinary medical education to all qualified residents who wish to pursue this career, but it does believe the State should assure that such educational opportunity is available to as many Maryland students

as is economically possible. To do otherwise means that our needs must be met at the expense of other states that have veterinary schools and that Maryland students could have a less equitable opportunity than students in many other states.

In order to afford Maryland residents equitable opportunities for veterinary medical education, about one entering student would have to be admitted per 100,000 residents (Law, Medicine, Veterinary Medicine: Issues in Supply and Demand; SREB, 1978). Maryland's current population of 4.2 million would mean that about 42 new Maryland students should be admitted to veterinary school each year in order to afford access at the national rate. Maryland contracts currently provide for 39 entering places. The State's population is projected to grow slowly in the future. Estimates are that the State will have 4.3 million residents in 1981. Allowing for continued slow growth, it is realistic to plan for a population of 4.4 million and approximately 44 new places a year for a total of 176 students enrolled at any given time.

The proposed regional school would admit a total of 80 students per year in the professional program. Therefore, when the school was in full operation, a total 320 professional students would be enrolled. Of this, 30 new Maryland residents per year would be admitted for a total of 120 in attendance per year when the school is in full operation. The proposed Maryland clinic would accommodate 30 FTE professional students in attendance at any given time.

While the 120 student places for Maryland residents envisioned in this proposal would be slightly larger than the number that will be available through contracts for the 1979-80 academic year, this proposal will provide fewer places than the 151 that will be available through contracts alone in future years. Therefore, some contracts will have to be

maintained in order to provide the small increase in access required for Maryland residents to enter veterinary school at the national average. The Task Force recommends that contracts be maintained with Ohio State, Cornell, and Pennsylvania. This would provide for up to 55 total spaces and up to 14 entering spaces in addition to the 120 total and 30 entering spaces available through VPI&SU. This total of 44 entering spaces would provide Maryland residents with about the same rate of access to Veterinary schools as the current national average (about one entering student per 100,000 population). This would also provide Maryland with the flexibility to reduce the number of entering spaces to the 30 per year level at VPI&SU if a manpower surplus develops.

In addition, the clinic would serve ten FTE postgraduate students per year as well as practicing veterinarians through programs of continuing education.

Operating Arrangements

The proposed teaching clinic would be operated by the University of Maryland. The University would be responsible for approval of faculty and staff appointments at the clinic, requesting State funds for Maryland's share of the costs, and determining general University policy regarding Maryland's participation with program.

The joint program with Virginia would operate as a single school with the VPI&SU and Maryland sites each having an administrative head and with the VPI&SU head serving as executive dean of the school. The committees on admission, curriculum, graduate and continuing education, and other policy areas would consist of representatives from VPI&SU and Maryland faculty.

A review board would be established to review continually the cost and effectiveness of the joint program. This review board would consist of representatives from VPI&SU, the University of Maryland, the SBHE, and the Virginia Coordinating Council. This Board would review on an annual basis the programs and budgets of the school and would be responsible for determining program costs, contractual fee levels, and other shared costs.

Location

The Task Force examined a number of possible sites for location of the teaching clinic. The Task Force feels that a number of locations would be suitable but that it is of prime importance that the clinic be located within the Washington-Baltimore corridor. Location in this region would provide a number of distinct advantages. For one, the bulk of the State's population is located in this corridor. About 77 percent of the State's residents reside in Baltimore City and Baltimore, Anne Arundel, Howard, Prince George's and Montgomery counties. Because of the number of companion animals is closely related to population size, a location in the Washington-Baltimore corridor would provide excellent access to services for small animals. Another advantage of a Washington-Baltimore location is good access to the State's two medical schools in Baltimore. This access would promote development of close relationships between the clinic and the medical schools which would enhance their research capabilities. A third advantage is proximity to Federal research agencies. These agencies have an increasing demand for DVM and Ph.D. veterinarians and this location would permit students to work closely with personnel at these agencies during their clinical and/or postgraduate years of study. The Washington-Baltimore area also would provide reasonably good access to the economic animal

population of the State, with the exception of poultry. The poultry industry would be served through outreach programs.

A number of potential sites are available on land currently owned by the University of Maryland. Some of the advantages and disadvantages of each are discussed below.

University of Maryland - College Park. UMCP presently is the site of the University's School of Agriculture and Animal Science programs. The campus is also located close to Federal agencies with which relationships could be established. On the other hand, the campus is located in an area that is becoming increasingly urbanized and the roads between the campus and I-495 are congested. The campus also is severely overcrowded. In addition, the campus is the furthest distance in the corridor from the Baltimore medical schools and most removed from the economic animal industry west and north of Baltimore.

University of Maryland - Baltimore County. UMBC does not have animal science or agricultural programs but does have a strong emphasis in the biological sciences area. The campus is close to the Baltimore medical schools and adjacent to the Baltimore beltway with uncongested connecting roads. The campus has good access via the beltway to animal populations north of the City and via I-70 to populations west of the city. In addition, the campus is underutilized and the addition of a veterinary program could enhance the prestige of the campus and make it more attractive to students. On the other hand, the UMBC campus is about 40 miles from the Federal research agencies in the Washington area. However, students working at these agencies would not require as high a level of access to the clinic as would those required to deal with clinical cases on a continuing basis.

University Plant Research Farm. The University's Plant Research Farm is located about seven miles northwest of UMCP near the intersection of Rt. 29 and Randolph Road. Like UMCP, it provides good access to Federal agencies and has better access to I-95 than UMCP. Its proximity to the UMCP campus would also permit close relationships with agriculture and animal science programs, although these and other programs in the biological sciences would not be as accessible as they would be if the clinic were located on a campus. On the other hand, the location is removed from the Baltimore medical schools and roads to I-495 are congested. Access to the economic animals north and west of Baltimore would be no better than UMCP. The area also has increasing residential and commercial development.

University Horse Research Farm. The Horse Research Farm is located near Columbia on Rt. 29. Its central location in the corridor would provide for equal access by Washington and Baltimore residents, agencies, and schools. The farm provides somewhat better access to the northern and western portions of the State than UMCP or the Plant Research Farm.

The Task Force believes that any other State-owned property available in the Washington-Baltimore region also should receive consideration.

6. IMPLEMENTATION AND FINANCING

This chapter contains a general plan for implementing the Task Force's proposal and an estimate of the costs for the next six years.

Implementation Schedule

VPI&SU plans to admit its first entering class in the fall of 1980 (FY 1981). This first entering class would utilize the VPI&SU facilities for the first three years of study: Fall 1980 (FY 1981), Fall 1981 (FY 1982), and Fall 1982 (FY 1983). This initial class would require clinical training during the fourth year of study: Fall 1983 (FY 1984).

Ideally, the Maryland teaching clinic would begin operation during Fall 1983 (FY 1984) to help provide clinical experiences for the initial entering class.

Operating Expenses and Income

<u>Personnel Expenditures</u>. Table 4 shows the staff that would be required to prepare for opening the clinic and for its operation. Also shown is the average salary that would have to be paid, by position, in order to enable the clinic to compete in the national market for high quality faculty.

Table 5 shows the total personnel costs for the pre-operational and operational phases of the teaching clinic.

TABLE 4

STAFFING REQUIREMENTS AND SALARY COSTS PER POSITION

Fall, 1985 FY 1986		4	7 9 10	20 70		67,663	60,145 52,627 45,109	18,044 18,044
Fall, 1984 FY 1985		7	7 9 10	20 70		63,833	56,741 49,648 42,556	17,022 17,022
Fall, 1983 FY 1984		7	7 9 10	20 70		60,220	53,529 46,838 40,147	16,059 16,059
Fall, 1982 FY 1983		7		7		56,811	50,499 44,187 37,874	15,150 15,150
Fall, 1981 FY 1982		1		1		53,596	47,641 41,686 35,730	14,292 14,292
Fall, 1980 FY 1981		1			4	50,562	44,944 39,326 33,708	13,483 13,483
	A. Positions	Administration Department Heads	Faculty Professor Assoc. Professors Asst. Professors	Support Staff Secretarial/Clerk Technical	B. Salary Costs Per Position*	Administration Department Head	Faculty Professors Assoc. Professors Asst. Professors	Support Staff Secretarial/Clerk Technical

*Increased 6% per year over current year (FY 1979). Base Year Salaries are: Department Heads - \$45,000; Professors - \$40,000; Associate Professors - \$35,000; Assistant Professors - \$30,000; Support - \$12,000.

TABLE 5

TOTAL PERSONNEL COSTS

		Fall, 1980 FY 1981	Fall, 1981 FY 1982	Fall, 1982 FY 1983	Fall, 1983 FY 1984	FY 1985	Fall, 1985 FY 1986
A.	Salaries and Wages						
	Administration Department Heads	50,562	53,596	227,244	240,880	255,332	270,652
	Faculty Professors Assoc. Professors Asst. Professors				374,703 421,542 401,470	397,187 446,832 425,560	421,015 473,643 451,090
	Support Staff Secretarial/Clerical Technical	1 13,483	14,292	30,300	1,445,310	1,531,980	1,623,960
	Total Salaries and Wages	\$64,045	\$67,888	\$257,544	\$2,883,905	\$3,056,891	\$3,240,360
B.	Fringe Benefits*						
ပ်	Total Personmel Costs	\$12,809	\$13,578	\$ 51,509	\$ 576,781	\$ 611,378	\$ 648,072
		\$76,854	\$81,466	\$309,053	\$3,460,686	\$3,668,269	\$3,888,432
Ç	7 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 1	((

General Operating Costs. Table 6 shows estimates of general operating expenses, other than personnel costs, for operation of the clinic. During the pre-operational phases it was assumed that these costs would add 5 percent to the salary and wage costs incurred. During the operational phase, it was assumed that these costs would amount to 40 percent over and above the salary and wage costs incurred. This latter percentage is about the same as that at the University of Maryland Baltimore City Teaching Hospital. It also approximates the percentages that the SBHE budgetary guidelines estimate is required to support graduate-level activities in laboratory-intensive fields of study.

Grants for Postgraduate Study. Table 7 indicates the amount of money required to provide ten fellowships per year to the postgraduate students studying at the clinic.

Contract Costs. The proposed arrangement would entail Maryland's contracting for spaces at VPI&SU for its residents equal to the number enrolled for the first three years of the professional program. Table 8 shows the costs to the State of Maryland for the contracts with VPI&SU.

Table 9 shows the number and cost of other contractual arrangements that would still be maintained under the proposal. The SREB contracts for entering spaces would be phased out as contracts with VPI&SU are added.

Table 10 shows the number and cost of VPI&SU and other contractual arrangements that would be provided for under the Task Force's proposal. In addition, there would be 30 professional students enrolled in the Maryland clinic for which contracts will not be required.

TABLE 6

GENERAL OPERATING COSTS*

Fall, 1985 FY 1986	\$2,160,240
Fall, 1984 FY 1985	\$2,037,927
Fall, 1983 FY 1984	\$1,922,603
Fall, 1982 FY 1983	\$13,555
Fall, 1981 FY 1982	\$3,573
Fall, 1980 FY 1981	\$3,371

*Estimates were drived by dividing salaries and wages by .95 for preoperational year and by .60 for operational years.

TABLE 7

GRANTS TO POSTGRADUATE STUDENTS*

Fall, 1985 FY 1986	\$ 18,044	\$180,440
Fall, 1984 FY 1985	\$ 17,022	\$170,220
Fall, 1983 FY 1984	\$ 16,059	\$160,590
Fall, 1982 FY 1983	0	0
Fall, 1981 FY 1982	0	0
Fall, 1980 FY 1981	0	Grant 0
	Cost per Grant	Total Cost per Grant

*Assumes ten grants per year; that \$12,000 per grant is adequate for FY 1979; and that grants will in-crease by 6% per year.

TABLE 8

EXPENDITURES FOR CONTRACTS WITH VPI&SU

	Fall, 1980 FY 1981	Fall, 1981 FY 1982	Fall, 1982 FY 1983	Fall, 1983 FY 1984	Fall, 1984 FY 1985	Fall, 1985 FY 1986
Contracts with VPI						
Operating Cost Per Maryland Student (1)	\$ 7,303	\$ 7,742	\$ 8,206	\$ 8,698	\$ 9,220	\$ 9,774
Capital Cost Per Maryland Student (2)	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Number of Contracts (3)	30	09	06	06	06	06
TOTAL COST FOR VPI&SU CONTRACTS	\$249,090	\$524,520	\$828,540	\$872,820	\$919,800	099,696\$

Assumes \$6,500 per year at FY 1979 level with 6% increase annually.

Assumes \$1,000 per year with no increase annually.

Assumes 30 additional spaces per year up to 90. Because the Maryland Clinic would educate 30 students per year, Maryland would not have to pay for 30 of the 120 Maryland residents enrolled.

TABLE 9

OTHER CONTRACTUAL ARRANGEMENTS

Fall, 1985 FY 1986	0	0		986,6	15	149,790			12,767	40	510,680	r.	660,470
Fall, 1984 FY 1985	0	0		9,421	15	141,315			12,044	70	481,760	u u	623,075
Fall, 1983 FY 1984	0	0		8,888	15	133,320			11,362	40	454,480	ע	587,800
Fall, 1982 FY 1983	6,136	149,664		8,385	15	125,775			10,719	40	428,760	70	704,199
Fall, 1981 FY 1982	5,789	277,872		7,910	15	118,650	•		10,112	30	303,360		699,882
Fall, 1980 FY 1981	5,461	393,192		7,462	15	111,930		Contracts	9,540	20	190,800	107	695,922
	SREB Contracts Avg. Cost No. of Spaces	TOTAL COSTS	Ohio State Contracts	Avg. Cost.	No. of Spaces	TOTAL COSTS		Pennsylvania/Cornell Contracts	Avg. Cost	No. of Spaces	TOTAL COSTS	TOTALS	Total Costs

Note: Assumes 6% annual increase in average cost per contract

TABLE 10

TOTAL CONTRACTUAL SPACES AND COSTS UNDER PROPOSAL

Fall, 1985 FY 1986	099 ° 696 ·	55	145		30		175
Fall, 1984 FY 1985	908,800	55 623,075	145 1,542,875	Made	30		175
Fall, 1983 FY 1984	90 872,820	587,800	145 1,460,620	yment is Not	30		175
Fall, 1982 FY 1983	90 828,540	79,199	169 1,532,739	for Which Pa	0		169
Fall, 1981 FY 1982	60 524,520	93 699,882	153 1,224,402	led in Clinic	0		153
Fall, 1980 FY 1981	30 249 , 090	107 695,922	137 945,012	Additional Maryland Students Enrolled in Clinic for Which Payment is Not Made	0	tudents Enrolled	137
	VPI&SU Spaces Total Cost	Other Schools Spaces Total Cost	TOTAL Spaces Total Cost	Additional Maryl,		Total Maryland Students	

Clinic Income. There are three main sources of income: clinic income for services performed, federal research grants, and student tuition and fees. Estimates of income from each of these sources are shown in Table 11.

State Contribution. Table 12 shows the estimates of State general funds that would be required to operate the clinic and to maintain contractual arrangements for veterinary medical education.

Capital Expenses

A preliminary study of the space required for the proposed clinic indicates that approximately 111,700 net assignable square feet (NASF) would be needed. Table 13 shows the space requirements for the clinic's various functions. These space requirements include adequate space for relocating the UMCP Veterinary Science Department to the clinic.

Table 14 shows the cost estimates for planning, constructing, and equipping the proposed clinic.

The capital expenditures for the clinic would be offset to some degree if the Veterinary Science Department at UMCP were to be transferred to the clinic and if the proposed clinic could accommodate the Agriculture Department's need for a diagnostic laboratory. An estimate of the savings resulting from development of a joint program for use of a diagnostic laboratory is not available. However, the University estimates that the cost of its proposed animal science complex at UMCP could be reduced by \$2.5 million if the Veterinary Science Department were transferred to the proposed clinic.

It should be noted that both the operating and capital expenditures required to implement the Task Force's proposal will result in a substantial number of benefits in addition to those accruing to students enrolled in the program. The public service and research benefits would be substantial

and would extend to far more residents of the State than if the proposed clinic were only a teaching-oriented one. In addition, because of the nature of the proposal, it can be anticipated that the clinic would develop into one of high quality. A listing of some of the major anticipated benefits is in the following chapter.

TABLE 11

PROJECTED CLINIC INCOME

Fall, 1985 FY 1986	751,815	751,815	112,770	
1984 Fal	709,260	709,260 7	106,380	
Fall, 1984 FY 1985	709,	709,	106,	
Fall, 1983 FY 1984	669,113	669,113	100,380	
Fall, 1982 FY 1983	ı			
Fall, 1981 FY 1982	. 1			
Fall, 1980 Fall, 1981 Fall, 1982 Fall, 1983 FY 1981 FY 1982 FY 1983 FY 1984	ı	2)		
	Income for Services (1)	Federal Research Grants (Student Tuition & Fees (3	

1,616,400	
1,524,900	
1,438,606	
TOTAL INCOM	

- (1) Assumes that income will be \$500,000 in FY 1979 dollars with 6% inflation per year. Assumes that 1/3 of faculty effort will be devoted to research (10 FTE) and that each FTE faculty devoted to research will receive \$50,000 annually in FY 1979 dollars in research money (with 6% annual inflation rate). (5)
- Assumes that 30 students in their clinical year will pay \$2,500 in FY 1979 dollars in tuition and fees (with 6% annual inflation rate). 3

rable 12

STATE GENERAL FUND REQUIREMENTS

	Fall, 1980 FY 1981	Fall, 1981 FY 1982	Fall, 1982 FY 1983	Fall, 1983 FY 1984	Fall, 1984 FY 1985	Fall, 1985 FY 1986
Expenditures						
A. Clinic Personnel General Operating Grants	\$ 7 6, 854 3,371 0	\$ 81,466 3,573	\$ 309,053 13,555	\$3,460,686 1,922,603 160,590	\$3,668,269 2,037,927 170,220	\$3,888,432 2,160,240 180,440
B. Contracts VPI&SU Other Schools	249,090 695,922	524,520 699,882	828,540 704,199	872,820 587,800	919,800 623,075	969,660 660,470
TOTAL EXPENDITURES	\$1,025,237	\$1,309,441	\$1,855,347	\$7,004,499	\$7,419,291	\$7,859,242
Income From Non-State Sources	ources					
TOTAL	0.	0	0	\$1,438,606	\$1,524,900	\$1,616,400
State General Funds Required Current Dollars \$1,025,237 (912,457)	uired \$1,025,237 (912,457)	\$1,309,441 (1,099,432)	\$1,855,347 (1,469,628)	\$5,565,893 (4,159,083)	\$5,894,391 (4,155,082)	$\frac{$6,242,842}{(4,151,610)}$

Assumes 6% Annual Inflation Rates. Changes After FY 1984 Due to Rounding.

TABLE 13

SPACE REQUIREMENTS FOR PROPOSED CLINIC

2. Offices Faculty and Post-Doctorate 40@120 Office Support	<u>Function</u>	Net Assignable Square Feet
College Administration 1,440 900 8usiness and Hospital Administration 300	1. Administration - Central	1,384
Departmental Administration 900 8usiness and Hospital Administration 300 4,024 sq.	College Administration	
Business and Hospital Administration 300 4,024 sq.	·	
2. Offices		
Faculty and Post-Doctorate 40@120 920 5,720 sq. Research Laboratories 35@288 10,080 2,520 12,600 sq. 4. Instruction and Extension Classroom area 4,150 Educational Resource Center 9,140 Student Area (including 10 Dorm Rooms) 4,300 17,590 sq. 5. Teaching Hospital Large Animal 19,905 Small Animal 8,785 Avian 740 Radiology 2,110 Central Services 3,200 Clinical Services 3,200 Clinical Services 2,920 Staff Area 990 Service Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 6. Animal Facilities Animal Quarters 19,280 Animal Surgery 3,165 Laboratory Animal Caretaker 640 Service Area 6,605 Records and Operations 970	•	4,024 sq. ft
Sesearch	 -	
3. Research		· ·
10,080 10,080 10,080 10,080 12,600 sq.	Office Support	
Laboratories 35@288 Support Facilities 2,520 12,600 sq. 17,590 sq. 18,950 sq. 18,950 sq. 18,950 sq. 19,280 sq. 11,150 sq. 11,150 sq. 11,150 sq. 11,150 sq. 11,150 sq. 11,150 sq. 12,600	Research	5,720 sq. ft
Support Facilities		10.080
12,600 sq.		• • • • • • • • • • • • • • • • • • •
Instruction and Extension Classroom area Educational Resource Center 9,140	Support rucarretes	12,600 sq. ft
Classroom area Educational Resource Center 9,140 Student Area (including 10 Dorm Rooms) 4,300	. Instruction and Extension	12,000 84. 11
Educational Resource Center Student Area (including 10 Dorm Rooms) 7,590 sq. Teaching Hospital Large Animal Small Animal Radiology Central Services Clinical Services Staff Area Destruction Area Service Area Farm Service Area Animal Quarters Animal Surgery Animal Caretaker Service Area Records and Operations 9,140 17,590 sq. 17,50 sq.		4.150
Student Area (including 10 Dorm Rooms) 4,300 17,590 sq.		
10 Dorm Rooms) 4,300 17,590 sq. Teaching Hospital Large Animal 19,905 Small Animal 8,785 Avian 740 Radiology 2,110 Central Services 3,200 Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. Animal Facilities Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	•	7,210
77,590 sq. Teaching Hospital Large Animal Small Animal Radiology Central Services Clinical Services Staff Area Destruction Area Service Area Farm Service Area Animal Facilities Animal Surgery Animal Surgery Animal Caretaker Service Area Service Area Service Area Central Service Area Control Service Service Area Control Service Con		4.300
Large Animal 19,905 Small Animal 8,785 Avian 740 Radiology 2,110 Central Services 3,200 Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. 6. Animal Facilities Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970		17,590 sq. ft
Small Animal 8,785 Avian 740 Radiology 2,110 Central Services 3,200 Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 6. Animal Facilities 19,280 Animal Ouarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	5. Teaching Hospital	
Avian 740 Radiology 2,110 Central Services 3,200 Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. 5. Animal Facilities Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Large Animal	19,905
Radiology 2,110 Central Services 3,200 Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. 5. Animal Facilities 19,280 Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Small Animal	8,785
Central Services 3,200 Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. 5. Animal Facilities 19,280 Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Avian	· · · · · · · · · · · · · · · · · · ·
Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. Animal Facilities 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Radiology	2,110
Clinical Services 2,920 Staff Area 1,360 Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. Animal Facilities 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Central Services	3,200
Destruction Area 990 Service Area 2,840 Farm Service Area 1,100 43,950 sq. Animal Facilities 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Clinical Services	
Service Area 2,840 Farm Service Area 1,100 43,950 sq. Animal Facilities 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Staff Area	1,360
Farm Service Area 1,100 43,950 sq. 5. Animal Facilities Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	Destruction Area	990
43,950 sq. Animal Facilities	Service Area	2,840
Animal Facilities Animal Quarters Animal Surgery Animal Surgery Animal Caretaker Service Area Records and Operations 19,280 3,165 1,150 640 540 52,605	Farm Service Area	
Animal Quarters 19,280 Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970	C Amdural Produktor	43,950 sq. ft
Animal Surgery 3,165 Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970		10 280
Laboratory 1,150 Animal Caretaker 640 Service Area 2,605 Records and Operations 970		
Animal Caretaker 640 Service Area 2,605 Records and Operations 970		
Service Area 2,605 Records and Operations 970	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Records and Operations 970		
	records and operations	27,810 sq. ft

TOTAL

111,694 sq. ft.

TABLE 14

ESTIMATES OF CAPITAL COSTS FOR PROPOSED CLINIC

Assumptions

- 1. Costs for construction and fixed equipment for FY 1979 are as follows:
 - (a) Hospital space, including office and instruction space: \$84.59/G.S.F.
 - (b) Research laboratories: \$102.58/G.S.F.
 - (c) Animal Facilities: \$23.38/G.S.F.
- 2. Planning costs are 4% of construction costs
- 3. Initial movable equipment costs are 7.5% of construction costs
- 4. Net assignable square feet (NASF) are 67% of gross square feet (G.S.F.)

Calculations

- 1. Construction/fixed equipment costs
 - (a) Hospital space: 114,282 G.S.F. x \$84.59 = \$9,667,114
 - (b) Research laboratories: $18,806 \text{ G.S.F.} \times \$102.58 = 1,929,119$
 - (c) Animal Facilities: 33,620 G.S.F. x \$23.38 = 786,036 TOTAL \$12,382,269
- 2. Planning costs .04 x 12,382,269 495,291
- 3. Movable equipment .075 x 12,382,269 928,670
 GRAND TOTAL \$13,806,230

NOTE: All figures are FY 1979 dollars. Cost in current dollars will depend on when construction is undertaken and annual inflation rates.

7. BENEFITS OF THE PROPOSAL

This chapter contains a summary and restatement of the major benefits that the Task Force believes would result from implementation of its recommendation for a cooperative veterinary program.

BENEFITS FOR ASPIRING STUDENTS OF VETERINARY MEDICINE & FOR EXISTING EDUCATIONAL INSTITUTIONS

- A. Opportunity for Maryland students equal to that for students of other (and neighboring) states and equal to that for aspirants to other professions.
- B. Minimization of the variety and inconsistency of prerequisite courses for pre-veterinary students.
- C. Enhancement of the State's total education and research programs in comparative medicine, animal science, and related programs.
- D. Control and input into the content and quality of veterinary medical education offered to the young people of Maryland.
- E. Enrichment of the proposed school at VPI&SU by regionalization of its program, augmentation of its requests for federal funds, and diversification of its student body and clinical instruction.

BENEFITS FOR THE VETERINARY PROFESSION IN MARYLAND

- A. Support of practicing veterinarians by availability of:
 - (1) excellent diagnostic laboratory service,
 - (2) consultation with specialist not now readily available,
 - (3) referral service, and
 - (4) improved continuing education.
- B. Opportunity for professional growth through graduate education training toward board certification of specialties, and related services.
- C. Source of personnel qualified to:
 - serve practices needing veterinarians with training appropriate to the conditions within Maryland and/or requested by veterinary practitioners of Maryland;
 - (2) meet the needs of firms and governmental groups for veterinarians trained to meet the requirements of research and public service oriented organizations.

BENEFITS FOR ANIMAL OWNERS & ANIMAL INDUSTRY

- A. Improvement in quality of veterinary service available through practitioners by example, demonstration, and assistance of the veterinary teaching faculty and clinic.
- B. Research directed toward solution of problems existing within the State.
- C. Improved economic efficiency of Maryland's animal industry due to:
 - (1) reduced losses and costs, and
 - (2) improved performance and production of animals.

BENEFITS FOR THE STATE OF MARYLAND AND ITS CITIZENS AND TAXPAYERS

- A. Ability to provide all the benefits listed.
- B. Attraction and retention of a strong animal industry and strengthening of efforts to preserve viable agriculture within Maryland.
- C. Decrease in the growing costs of food and fiber.
- D. Improvement in our approach to environmental and public health problems associated with industry, agriculture, and wild life.
- E. Pride in a program and facility designed to meet efficiently the needs of Maryland, its major industry, and many of its youth.

References

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- 3. University of Maryland. A Study to Determine the Need for Veterinarians in Maryland (College Park, 1977).
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- 5. The Johns Hopkins University. A School of Veterinary Medicine at the Johns Hopkins University Feasibility Study (Baltimore, 1978).
- 6. Southern Regional Education Board. Law, Medicine, Veterinary Medicine: Issues in Supply and Demand (Atlanta: SREB, 1978).
- 7. Southern Regional Education Board. <u>A Current Overview of Veterinary Medical</u> Education in the South (Atlanta: SREB, 1978).
- 8. Arthur D. Little, Inc. <u>Veterinary Supply and Demand in the United States</u> (July, 1978).
- 9. U. S. Department of Health, Education, and Welfare. On the Status of Health Professions Personnel (Washington: USGPO, 1978).

APPENDIX

POSITION STATEMENTS BY THE MARYLAND VETERINARY MEDICAL ASSOCIATION

CONCERNING VETERINARY MEDICAL EDUCATION IN MARYLAND

MARYLAND VETERINARY MEDICAL ASSOCIATION

June 6, 1974

The Honorable Marvin Mandel Governor of Maryland State House Annapolis, Maryland 21404

Dear Governor Mandel:

The Maryland Veterinary Medical Association is deeply concerned about the future of veterinary medical education in the State of Maryland. Without adequate provision for veterinary education we can neither provide the opportunity for our young people to enter the profession nor provide for the future needs for veterinarians in the State.

In 1968 there were 517 veterinarians in Maryland; by 1972 there were 652. That's an increase of 36 per year. During this time we have educated not more than 15 per year. This is far short of the demand. Over one-half of the new veterinarians are educated in other states and probably are not Maryland citizens.

At present, there are 300 students registered as pre-veterinary students in the three-year program at the University of Maryland. From these 300, from students in other University of Maryland departments, and from students at other colleges and universities, we have 110 qualified Maryland students who are competing for the available spaces with our contract schools of Veterinary Medicine. Each year, under the Southern Regional Education Board Program (SREB). the University of Georgia will accept not over 12 students (last year it was 11); Tuskegee will accept 1½ students. Outside the SREB, Ohio State will accept from 0 to 6, but with no guarantee that any will be accepted. Two were accepted last year. Simple arithmetic shows this to be 13 or 14 plus students per year. Last year it was 14.

Unbelievably, the State of Maryland is programmed to provide a shortage of veterinarians from its own resources. We have an immense problem with no adequate solution at present. We have the desire of our young people for a veterinary education and they get the pre-veterinary training. This is available to them within the State at the University of Maryland. For many it's a dead end ... there is no opening in a professional school. And the State needs veterinarians.

We hope that a solution or a start on a solution can be initiated immediately. Some ideas have been suggested, but others may provide a better answer. The following are a few that we are aware of:

1. The State of Maryland could develop its own School of Veterinary Medicine.

Page 2
The Honorable Marvin Mandel
June 6, 1974

- 2. Maryland could combine with sister states, i.e, Delaware, Virginia, West Virginia to establish a School of Veterinary Medicine.
- 3. The State could subscribe to a School of Veterinary Medicine for a greatly increased guaranteed number of students every year with or without some direction of that school's policy.
- 4. We could cooperate with the Federal Government in establishing a School of Veterinary Medicine at Beltsville and offer the Pre-Veterinary Program at the University of Maryland as part of its curriculum.
- 5. The Armed Forces Institute of Pathology, the Department of Health, Education, Welfare and the State of Maryland could provide a school to serve the needs of each interested party.

The above is only a listing of ideas. We could comment extensively on each of them but everyone has his own. We would be pleased to discuss them with you at your convenience. We must start immediately to arrive at a solution of the present needs of our Maryland students and to supply the citizens of our State with the necessary veterinarians to provide them with the high quality veterinary service that they demand.

Sincerely,

MARYLAND VETERINARY MEDICAL ASSOCIATION

/s/ C. H. Little, Jr., D.V.M.

C. H. Little, Jr., D.V.M. Chairman, Liaison Agriculture Committee

CHLJr/ts

POSITION STATEMENT OF THE MARYLAND VETERINARY MEDICAL ASSOCIATION ADOPTED NOVEMBER, 1978

"Even if there are deficiencies in the present method of producing veterinarians in Maryland, the welfare of the State will best be served by continuing contractual arrangements with several schools of veterinary medicine (presently being done in the State) rather than entering a very expensive venture of constructing a veterinary school in Maryland."

Maryland Veterinary Medical Association

330 North Charles Street • Baltimore, Maryland 21201 • (301) 385-2990.

March 16, 1979

Dr. Sheldon H. Knorr Commissioner - State Board of Higher Education 16 Francis Street Jeffrey Building Annapolis, MD 21401

Dear Dr. Knorr:

The Board of Directors of the Maryland Veterinary Medical Association has approved the following motion which is forwarded to you for your information and that of the Task Force on Veterinary Education in Maryland:

"The Maryland Veterinary Medical Association Board of Directors is opposed to a joint venture with Virginia Polytechnic Institute with regard to the establishment of a regional veterinary school and urges that Maryland should continue its present contractual arrangements with other veterinary schools."

Sincerely,

MARYLAND VETERINARY MEDICAL ASSOCIATION

Ray Thompson

Executive Director

RT/cel

President
Dr. R. Gary Roop
President-Elect
Dr. Robert H. Batchelor
Vice President
Dr. Sandra O. Karn
Secretary-Treasurer
Dr. John E. Hayes
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Dr. Jack E. Shanks
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Dr. Carvel G. Tiekert - '79



MINORITY DISSENT TO THE TASK FORCE REPORT ON VETERINARY EDUCATION IN MARYLAND

The Maryland Veterinary Medical Association believes it very unwise for Maryland to join with the state of Virginia to start a new College of of Veterinary Medicine when recent health manpower studies predict an over-abundance of veterinarians in the next 5-10 years.

The MVMA does not dispute the fact that Maryland should make provisions to educate the present number of forty veterinarians annually. We feel, however, this should be done through the already established veterinary colleges.

In this way, Maryland would not be adding to the oversupply of veterinarians expected to occur by 1985-1990.

Another new professional veterinary school has already begun operations, earlier this year, in North Carolina at North Carolina State University. Perhaps the middle Atlantic area can justify one new veterinary college even though the projected manpower studies tend to tell us that now is not the time. But our Association thinks it is unwise that two adjoining states, North Carolina and Virginia, build new separate veterinary colleges, especially since Tennessee also has a new school already in operation.

It would have been preferrable if the states of North Carolina, Virginia and Maryland could have exercised patience and cooperated in forming one new regional school instead. But for the three states to have two new schools at this time does not make good sense or good use of the tax-payers money.

To say that another new veterinary school will "not add" to the manpower situation being predicted in the late eighties is foolhardy. Educators who plan training programs for our young people generally have a good track record but they are not infallible. It is well known that educators overdid it in producing teachers and lawyers. There is now some speculation that we no longer have a shortage of physicians and dentists.

New colleges of veterinary medicine are not cheap to build nor inexpensive to maintain. They are quite similar to schools of other health professions. It takes both federal and state tax dollars to build and operate these schools - - - plus the ever increasing tuition fees for the individual student.

I think it is wrong to train so many students when we know they are apt to be faced with a job market shortage. It can actually be a disservice to the student after he or she has made the various sacrifices in time, tiring effort and money to complete preparatory and professional school training. The current D.V.M. graduate is required to take a minimum of seven years of schooling; for many it is eight or more years.

But please understand me. The picture is not totally bleak. Most likely, in the years to come, there will be more openings available in the public sector in the areas of research and regulatory veterinary medicine. However, these fields do not appeal to the typical aspiring preveterinary student as much as does the role of the private practice.

As for the teaching hospital clinic in Maryland, the members of the TASK FORCE panel are telling us that one is needed while practitioners in Maryland question the justification. One could ask if the teaching hospital is being proposed as a means to justify the new Regional Veterinary College at Blacksburg, Virginia.

It is questionable for one college to have the support of two teaching hospitals for the sake of economics. If it is to give the fourth year student exposure to actual practice of veterinary medicine, then it may be preferrable to consider the alternative of preceptorships. What a preceptorship actually involves is that a student would spend several 4-week blocks in various on-site training situations. It may be in either private practice or in the various public sectors.

Many general practitioners wonder if the proposed teaching hospital clinic, located in the Baltimore-Washington corridor, will be as convenient to the agricultural population as one might think. Also one must not forget that the University of Pennsylvania School of Veterinary Medicine has the outstanding New Bolton Center at Kenneth Square for large animals. Most of the horse population in Maryland would be as close to the Pennsylvania facility if the Maryland clinic were to be situated in the Washington area. The clinic being planned could not compare with what New Bolton Center offers at present.

As for small animals, there may be some good purpose served but, there again, we already have some specialists established in the area. Though there is need for more, the trend is that more D.V.M.'s are going into board certification programs. I would guess specialists will more than double in numbers during the next five years and continue to do so over the years.

In the past, I think the veterinary profession in Maryland would have embraced the idea proposed by the Task Force. Who knows in five years from now? The manpower picture nationally may improve where we would wholeheartedly endorse a regional veterinary college.

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